

## DETAILED ACTION

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ronald J. Kubovcik (Reg#25,401) on 12/16/2009.

### IN THE CLAIMS

Please amend the claims as follows:

1. (**Currently amended**) A peritoneal dialyzer comprising: a catheter capable of injecting and discharging peritoneal dialysate in an abdominal cavity of a patient; a peritoneal dialysate circuit external of the patient connected to the catheter; and a dialyzer provided in the peritoneal dialysate circuit, said dialyzer comprising a hemodialysate circuit connected so that peritoneal dialysate passing through the inside contacts hemodialysate via a hollow fiber membrane, wherein a means ~~capable of~~ for measuring an osmotic agent concentration in peritoneal dialysate flowing in the peritoneal dialysate circuit is provided in the peritoneal dialysate circuit on the side of the end at which the catheter is connected with respect to the dialyzer, and a mechanism for dehydrating the peritoneal dialysate according to the osmotic agent concentration measured by said means is provided in the hemodialysate circuit, and the peritoneal dialysate in the peritoneal dialysate circuit contacts the hemodialysate

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in the hemodialysate circuit via the membrane of said dialyzer and water in the peritoneal dialysate is removed to the hemodialysate via said dialyzer by said dehydrating mechanism, said dehydrating mechanism being one selected from the group consisting of:

(1) a pump provided in a hemodialysate inflow channel to the dialyzer and a pump provided in a hemodialysate outflow channel from the dialyzer, the pumps being driven so that a flux in the pump on the outflow channel side is larger than a flux in the pump on the inflow channel side;

(2) a pump which can equalize the flux of hemodialysate inflowing into the dialyzer and the flux of hemodialysate outflowing from the dialyzer arranged in the hemodialysate circuit; a branch channel provided on a hemodialysate outflow channel at a position closer to the dialyzer than said pump; and a dehydrating pump provided in the branch channel and driven so that the amount of hemodialysate outflowing from the dialyzer becomes larger than the amount of hemodialysate inflowing into the dialyzer; and

(3) a viscous pump which varies the capacities of a chamber on the side of the hemodialysate inflow channel and a chamber on the side of the hemodialysate outflow channel according to the movement of a diaphragm provided in the hemodialysate circuit, with dehydration being performed by varying the capacities so that the capacity of the chamber on the side of the inflow channel is smaller than the capacity of the chamber on the side of the outflow channel and the amount of hemodialysate outflowing from the dialyzer is larger than the amount of hemodialysate inflowing into the dialyzer.

2. **(Currently amended)** A peritoneal dialyzer according to Claim 1, characterized in that said means ~~capable of~~ for measuring said osmotic agent concentration is at least one type of means selected from the group consisting of an ultrasonic wave measuring apparatus, a refractive index measuring instrument, a light absorption instrument, and a conductive rate measuring instrument.

10. **(Currently amended)** A peritoneal dialyzer according to according to Claim 7 1, characterized in that said osmotic agent cannot pass through the hollow fiber membrane in the dialyzer.

11. **(Currently amended)** A peritoneal dialyzer according to Claim 7 1, characterized in that said osmotic agent is at least one type of compound selected from the group consisting of albumin, glucose polymer and dextran.

***Allowable Subject Matter***

Claims 1-2 and 5-11 are allowed over the prior art of record as filed in the 04/30/2008 reply and this office action (see above).

The following is an examiner's statement of reasons for allowance: The claims in this application have been allowed because the prior art of record fails to disclose either singly or in combination the claimed device of a peritoneal dialyzer including: a peritoneal dialysate circuit connected to a catheter; and a dialyzer provided in the peritoneal dialysate circuit, the dialyzer including a hemodialysate circuit connected so that peritoneal dialysate passing through the inside can come into contact with a hemodialysate via a hollow fiber membrane,

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characterized in that a device for measuring an osmotic agent concentration in the peritoneal dialysate is provided on the peritoneal dialysate circuit on the side of the end at which the catheter is connected with respect to the dialyzer, and a mechanism for dehydrating the peritoneal dialysate according to the osmotic agent concentration measured.

The closest prior art of record is Jacobsen et al. (USPN5,141,493) and Karoor et al. (USPN2003/0105424), however these references do not disclose the device as claimed or described above.

Regarding claims 1 and 7, the closest prior art of record fails to teach among all the limitations or render obvious the specifics of the osmotic measuring system and dehydration mechanism.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Koharski whose telephone number is 571-272-7230. The examiner can normally be reached on 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Lucchesi can be reached on 571-272-4977. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Date: 12/23/2009

/Christopher D Koharski/  
Examiner, Art Unit 3763

/Nicholas D Lucchesi/  
Supervisory Patent Examiner, Art Unit 3763